

Subject: December 9, 2005 Meeting Minutes

A meeting of the Perchlorate Community Advisory Group (PCAG) was held at the San Martin Lions Club, 12415 Murphy Avenue, San Martin, on December 9, 2005 at 2 pm.

I. Ms. Sylvia Hamilton, PCAG Chair, led the **Pledge of Allegiance**

II. **Administrative Items**

A. *Introductions*

B. *Attendee Sign-in Sheets*: Ms. Hamilton advised people to add their name and contact information to the sign-in sheets if they would like to be on the PCAG mailing list.

C. *Open Forum*: The Groundwater Resources Association will be hosting their national Perchlorate Symposium at the Santa Clara Hyatt on Jan 26, 2006. There will be an extensive discussion of perchlorate in the drinking water. Normal admission costs are 300.00 per person but two people from PCAG are encouraged to attend at no cost. For more information, please contact Sylvia Hamilton.

D. *November 4, 2005 meeting minutes*: Approved as written

E. *2006 meeting dates*: Approved as written

III. **Presentations**

A. *Jon Rohrer, Komex- Gilroy and Morgan Hill's Consulting Firm*

1. *Gilroy Sentry Wells*

- a) Gilroy Water Resources: Groundwater, the City's sole source of drinking water, comes from eight different wells, four of which are located near Highway 101 and the perchlorate plume. The four wells constitute more than half of the City's capacity. The City is planning to add more wells to increase reliability and add capacity. However, the process of determining optimal locations for and constructing the new wells will take years to achieve, especially considering the perchlorate problem.
- b) City's perchlorate timeline:
 - Sept 03: City requests sentry wells
 - Jan-12-04: City contingency plan completed
 - Mar-03-05: CAO issued, requiring sentry wells
 - Apr-09-05: Due date for sentry well plan, no new wells proposed, only existing wells that are inadequate
 - Jun-03-05: Monitoring well and characterization plan due, MW Plan received 7/5/05, no sentry well included
 - Aug-12-05: Characterization plan with first mention of sentry wells included

- Sept-23-05: RWQCB rejects characterization plan
 - Oct-24-05: New characterization plan submitted, only minor changes made to document
 - Oct-31-05: Unsolicited groundwater flow assessment issued with recommendations for data collection for sentry wells, but no actual plan for sentry well installation
- c) City Perchlorate Contingency Plan: As of today, no perchlorate has been detected in City water. However, the City is prepared for a future occurrence of perchlorate. The 3 component plan includes (1) contingency preparations for treatment at Wells #5, #6, #7, and #8/8a, (2) accelerated construction of new wells, and (3) contingency implementation of temporary phase III water conservation if a well needs to be removed from service due to perchlorate.
- d) Groundwater Flow Assessment (GFA)
- (1) Olin concluded that groundwater flow in the Gilroy area has an easterly component and water production is sustained by significant recharge from the Uvas Creek drainage. There also appears to be little likelihood for perchlorate to impact municipal water wells.
 - (2) Komex comments that groundwater does not flow only to the east. The influence of Uvas Creek is theory not fact. New sentry wells are needed.
- e) Uvas Creek Influence: Mr. Rohrer reported a discrepancy between Olin's interpretation of a Lawrence Livermore National Laboratory (LLNL) report and the actual report text regarding the influence of recharge from Uvas Creek on Gilroy wells.
- f) Problems with Multiple Plume Interpretations: Komex reported that the 3 documents of interest for sentry wells are the monitoring plan, Llagas Subbasin Characterization Work Plan, and the Gilroy GFA report. All three show different interpretations of the plume's location. The plume interpretations vary report to report, and in some cases, even with the same report. Varying interpretations make assessing Olin's assertions and plans almost impossible. A common basis for plume maps (e.g. maximum detected concentration) is needed.
- g) Multiple Plume Depictions: Komex believes that multiple versions of plume maps are confusing. On all maps, the two monitoring points proposed by Olin do not provide sentry well coverage to the north and east of wells 5, 7, 8 and 8a.
- h) City Request to RWQCB
- (1) Include the recommendations and data from the GRA in the Characterization Work Plan, thus becoming part of the CAO process
 - (2) Require at least three sets of Sentry Wells be installed
 - (3) Require that the sentry wells are installed within 18 months, which will accommodate the data collection recommendations in the GFA report.

Questions and Answers

Q: Has Olin agreed that water is moving to the west in certain circumstances?

A: Not sure, because different reports indicate different things.

Q: Are sentry wells used for anything other than collecting data?

A: No, they are special monitoring wells.

Q: If you are using those wells for irrigation and pumping, might you have the plume come closer?

A: Yes, but the wells would only be for monitoring.

Q: What is the status of getting these wells installed?

A: Eric Gobler, RWQCB, answered that the Regional Board is in agreement with the City regarding the need for Sentry Wells. They are part of characterization plan and the RB is still working with Olin to get details worked out.

Q: What are advantages or disadvantages to drilling new wells as opposed to using old wells?

A: Wells that were installed for other things usually have screens that are longer than what scientists need to characterize the plume, or the construction data for the old wells is missing.

Q: Are the existing wells in the same strata as the Gilroy wells?

A: We do not know if they are or are not. The City needs certainty in where it can construction new wells.

Comment: We have not seen a cross-section map of the plume. As the plume moves south, it can also move vertically.

Response: Yes, the plume could move up or down.

Q: Will sentry wells have the ability to test at different depths?

A: Yes.

Comment: Mr. Gobler noted that the purpose of the characterization report that Olin is preparing is to define the vertical and horizontal plume dimensions, so that cross-sections of the plume can be prepared.

2. *City of Morgan Hill Northeast Flow*

- a) Historic Groundwater Levels and Flow: A United States Geological Survey, 1917, report entitled "Ground Water for Irrigation in the Morgan Hill Area, California" included groundwater level data for a series of wells in the Morgan Hill area. Contouring USGS data from Winter, 1916 shows a groundwater depression north and east of the future location of the Olin site.
- b) Recent Water Levels: A 2004 Olin report evaluating 2001 water level data and contouring of 2001 water levels by Olin's own consultant shows clear influence in 2001 of City's wells north and east of the Olin site.
- c) 3rd Quarter 2005 Groundwater Results: Olin installed piezometers north and east of the site and their own interpretations shows a clear gradient to the north

- and east from beneath the site. Data required by the RWQCB of Olin are still not available.
- d) Groundwater Velocities: 2004 Olin Report estimated groundwater would flow from the Olin site to the Nordstrom well in 17 to 59 years. This estimate assumed a “hypothetical” gradient of 0.002 feet/foot. The 3rd Quarter report confirms a northeast gradient 0.0025 feet/foot. Given this travel time estimated by Olin and the length of time Olin operated, perchlorate could easily have migrated from the site to the City’s wells.
 - e) Conclusion: There is a reasonable evidence to indicate that Olin is the party responsible for perchlorate in the City’s wells.

Questions and Answers

Q: Could the contaminated water reach up to Cochrane Road and monitoring wells there?

A: Probably not

Q: Is the depression in the ground or in the water?

A: The depression is in the water and more information can be obtained from MACTEC's quarterly report.

Q: Can we obtain a copy of these slides?

A: Yes, everything presented today is public material. Copies can be found at the Gavilan Community College repositories and online at the San Martin Neighborhood Alliance website (www.smneighbor.org)

Q. Prior to Madrone Ponds being active, would the groundwater depression have been deeper?

A. Not sure, but hydrogeology indicates it would be.

Q. How do contour lines extend beyond where they are drawn?

A. We do not know. More data points are needed.

- 3. *City of Morgan Hill* (Jim Ashcraft) – Mr. Ashcraft requested that PCAG support Morgan Hill’s belief that there is a northeasterly flow of perchlorate from the Olin perchlorate site, which includes writing a letter to RWQCB Executive Officer Roger Briggs stating their concern about this issue.

B. *RWQCB Update* (Eric Gobler and David Athey)

- 1. Mr. Gobler reported that Mr. David Athey, who is the RB’s Perchlorate Project Manager, has been promoted and will no longer be working on the Olin case. Mr. Hector Hernandez will be replacing him. Mr. Hernandez has cleanup and perchlorate experience and has been at the Regional Board since 1989. The staffing transition will be completed between now and the February 2006 Regional Board meeting.

2. *Alternative Water CAO*

- a) Ion Exchange Treatment System Installation Status:
- (1) 9 systems have been installed
 - (2) 1 system installation is still pending
 - (3) 1 system design pending
 - (4) 3 Well evaluations underway
 - (5) 9 Access Agreements
 - (6) 3 non-operative wells

Question and Answer

Q. How is Olin determining which wells receive treatment?

A. All wells above 6 ppb must receive replacement water. In accordance with Olin's Revised Alternative Water Supply Plan, wells with concentrations above 10 ppb perchlorate received treatment systems first. Now, Olin is working on wells with concentrations between 6 and 10 ppb.

- b) Bottled Water Discontinuation: Olin has requested approval to discontinue bottled water to 169 well users. The 78 wells that serve the well users have four quarters of perchlorate testing results below 4 ppb. Regional Board staff are bringing a draft resolution to the Regional Board for consideration on February 10, 2006 in Salinas. The draft resolution and testing results are being mailed to well users, PCAG, and interested parties with a 30-day comment period.

Questions and Answers

Q. Has any more work been done on ion exchange systems on domestic wells and bacteria growth?

A. Olin is changing canisters due to bacteria build up and then the system is sterilized. Olin Corp has been good with their maintenance of these systems. Currently, DHS is reviewing the coliform bacteria issue. They are requiring US Filter to submit data and DHS will make their decision based on those results.

Q. Does DHS certify the whole system or just the filter?

A. The whole system.

Q: If Olin is successful, then 169 will wells lose water. How will those wells be monitored after that?

A: 72 wells will not be monitored at all and 6 others will be checked semi-annually.

Q: Does the RB's board need sign-off on these wells being taken off bottled water?

A: Yes, the final decision is made by the Regional Board members. In the future, if they have 4 quarters of data beginning May 2005, then Olin can ask RB staff for approval to stop bottled water. Public comments and concerns can be voiced at the Regional Board meeting or in writing. If anyone would like to attend the meeting, please contact Mr. Athey.

Q: Is it a RB staff recommendation to discontinue bottled water for these wells?

A: Yes

Q: Will the people who are in danger of having their bottled water stopped be notified ahead of time about the public hearing?

A: Yes, they will be.

Q: If we have a dry year this year, levels of contamination might go up again. Can the Regional Board require conditional monitoring?

A: That is a possibility and those comments should be made at the meeting in February.

Q: If individuals wanted to test their own wells, can that be used for data and will they automatically be given bottled water again should those tests indicate there is a need?

A: If data shows that there are high levels of contamination the RB will have water re-supplied. Sequoia Analytical in Morgan Hill is certified for perchlorate testing.

3. *Groundwater Cleanup CAO*

- a) Revised Llagas Subbasin Characterization Work Plan – Comments have been received from the City of Gilroy and the Santa Clara Valley Water District. The RB will submit their comments by the end of next week.
- b) Southern well installation - Southern well installation almost complete, currently MP 29 is being installed.

An audience member commented that crew members working on well MP 29 have a tendency to start working early in the morning on the weekends and it gets to be bothersome for the residents of the area. Mr. Bob Cerruti added that the crew comes from Arizona for a small period of time and has a limited amount of time to finish their jobs, which makes it impossible for them to not use weekends.

Mr. Athey informed the group that the drilling program is almost over and they are receiving a lot of good data from the wells.

- 4. 3rd Quarter Groundwater data – 858 wells were tested offsite. 219 wells have contamination levels of between 4 and 6ppb perchlorate and 36 wells were above 6 ppb. Of the 36 wells above 6 ppb, 8 are above 10 ppb.
- 5. Northeast Flow: Olin re-sampled a number of wells in November in order to monitor the flow of groundwater. The first groundwater elevation data from the Northeast flow has been submitted in the 3rd quarter report. A meeting is scheduled for December 20, 2005, in which the City of Morgan Hill, Santa Clara Valley Water District, and Olin Corporation will discuss the data about the Northeast Flow issue. Morgan Hill has requested a Regional Board decision about naming Olin a discharger for Northeast contamination. However, the Regional Board is currently focusing on San Martin replacement water and sentry wells and will not be switching gears to work on Northeast issues until next year.

Questions and Answers

Q. Can the RB make a decision regarding northeast flow without absolute proof?

A: The RB would like reasonable evidence to support the decision.

Q. What is the real difference if the Regional Board issues a CAO to Olin for Northeast?

A. Mr. Ashcraft responded that there is more certainty under a CAO.

Q. How long was the Regional Board staff planning to wait to make a determination?

A. One year, until a full year's worth of data is collected and analyzed.

There was discussion regarding whether PCAG should support Morgan Hill's request that the Regional Board name Olin the discharger for Northeast contamination and issue a CAO. Comments included that there seems to be evidence to support the conclusion, we should support Morgan Hill, and delays are costing Morgan Hill and its residents money.

PCAG passed a motion to support Morgan Hill's request that the Regional Board name Olin the discharge for Northeast contamination and issue a CAO.

- C. *Domestic Well Ion Exchange Systems Update*- Ms. Hamilton reported that she recently talked to Mr. Rick McClure regarding ion-exchange and how the certification process is progressing. Mr. McClure said that Olin is waiting on U.S. Filter to submit information to the Department of Health Services (DHS).

IV. **Next Meeting** – Friday, February 3rd from 2- 4 pm (No Meeting in January 2006)

Meeting was adjourned.

Minutes submitted by Zohra Karimi